



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,536	03/28/2001	Shmuel Shaffer	062891.0502	4715

7590 06/10/2005

Terry J. Stalford  
Baker Botts L.L.P.  
2001 Ross Avenue, Suite 600  
Dallas, TX 75201-2980

EXAMINER
----------

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
----------	--------------

2661

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/821,536

Applicant(s)

SHAFFER ET AL.

Examiner

Joshua Kading

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, 12-18, 23-29, 34, and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,512,746 B1, Sand.

Regarding claims 1, 12, and 23, Sand discloses a method and logic encoded in media (*col. 4, lines 59-61*) for "a system logging voice quality issues, comprising: means for receiving a signal from a user for logging quality information for packet switched voice connection at an endpoint the voice connection (*col. 5, lines 51-58 where the IP datagrams (signals) are received at the endpoint to determine voice GOS or quality*); means for collecting, in response to the signal, voice samples from the voice connection at the endpoint (*col. 5, lines 51-58 where since the voice samples are contained within the signal, and the samples must be collected when the signal arrives, it is inherent that the signals are collected in response to the signal*); and means for storing the voice samples in a...log at the endpoint (*col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6*)."

Art Unit: 2661

However, Sand does not explicitly disclose that the log is an "error" log. Although the log (calibration file) of Sand is not called an "error" log, it would have been obvious to one with ordinary skill in the art at the time of invention to call the file an "error log" as a matter of design choice. The name of the file does not matter so much as what is stored in that file. In the case of Sand, the calibration file contains the voice samples as indicated in the claim language. The motivation for using a log is to have an acceptable benchmark with which to compare voice transmitted through the network; this will allow the endpoint(s) to determine voice quality and thus determine if the network can support a VOIP connection.

Regarding claims 34 and 38, Sand discloses "a method logging voice quality issues, comprising: receiving a signal initiated by a user at an endpoint indicating voice quality degradation of an ongoing voice connection (*col. 5, lines 51-58 where the IP datagrams (signals) are received at the endpoint to determine voice GOS or quality*); collecting, in response to the signal, voice samples from voice connection at the endpoint (*col. 5, lines 51-58 where since the voice samples are contained within the signal, and the samples must be collected when the signal arrives, it is inherent that the signals are collected in response to the signal*); collecting system parameters indicative quality the voice connection at the endpoint, the system parameters corresponding in time to the voice samples (*col. 6, lines 5-10*); synchronizing the system parameters with the voice samples (*col. 6, lines 11-28 where the "post correlation analysis" taken in step 2 provides the data for appropriately synchronizing the system parameters with the*

Art Unit: 2661

*voice samples because the IP source/destination, and timestamp are unique for each voice sample and thus this information can be used to further synchronize the samples at a latter time); and storing the voice samples and system parameters synchronously in a...log at the endpoint (col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6)."*

However, Sand does not explicitly disclose that the log is an "error" log. Although the log (calibration file) of Sand is not called an "error" log, it would have been obvious to one with ordinary skill in the art at the time of invention to call the file an "error log" as a matter of design choice. The name of the file does not matter so much as what is stored in that file. In the case of Sand, the calibration file contains the voice samples as indicated in the claim language. The motivation for using a log is to have an acceptable benchmark with which to compare voice transmitted through the network; this will allow the endpoint(s) to determine voice quality and thus determine if the network can support a VOIP connection.

Regarding claims 3, 14, 25, and 40, Sand further discloses, "wherein the signal comprises a locally initiated signal (*col. 7, lines 35-37 where the signal is produced at a local endpoint*)" and "wherein the signal comprises a signal initiated at the endpoint (*col. 11, claim 38; col. 7, lines 35-37 where the signal is produced at a local endpoint*)."

Regarding claims 4, 15, 26, and 41, Sand further discloses, "means for collecting system parameters indicative of quality of the voice connection at the endpoint (*col. 6, lines 5-10*); and means for storing the system parameters in the error log at the endpoint (*col. 7, lines 31-34 where the system parameters from col. 6 are used in the creation of the log file and therefore are inherently stored in the log file*)" and "collecting system parameters indicative of quality of voice connection at the network node (*col. 12, claim 41; col. 6, lines 5-10*)."

Regarding claims 2, 5, 13, 16, 24, 27, and 39, Sand further discloses, "means for maintaining the error log at the endpoint (*col. 7, lines 31-43 where the process of using the calibration file to compare the sent/received signal means that the file has been maintained, at least for use in the comparison; further it should be noted that the signal and samples produced are locally collected, i.e. they are collected at the endpoint received*)."

Regarding claims 6, 17, 28, and 42, Sand further discloses, "means for associating system parameters corresponding in time to a voice sample with the voice sample in the error log (*col. 6, lines 5-10 where the parameters are all determined based on several characteristics including a timestamp*)."

Regarding claims 7, 18, 29, 36, and 43, Sand further discloses, "wherein the system parameters comprise a plurality of lost and late packet counts (*col. 6, lines 6-7*),

Art Unit: 2661

convergent state of echo cancellers (*col. 6, lines 27-28 where the echo values used here are parameters used in conjunction with those of step 4*), number of packets stored in a jitter buffer (*col. 6, lines 6-7 where as is known in the art jitter is partially determined using the number of packets stored in the jitter buffer*) and end-to-end latency of the voice connection at the endpoint (*col. 6, lines 6-7*)."

Regarding claim 37, Sand further discloses, "wherein the voice connection comprises a voice over Internet protocol (VoIP) connection (*col. 5, lines 55-56 where IP voice datagrams mean the connection is VoIP*)."

3. Claims 8-11, 19-22, 30-33, 35, and 44-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sand in view of U.S. Patent 6,363,065 B1, Thornton et al. (Thornton).

Regarding claims 8, 19, 30, and 44, Sand further discloses, "...a second endpoint to the voice connection to log quality information for the voice connection at the second endpoint (*col. 6, lines 21-22*), the quality information including voice samples from the voice connection at the second endpoint (*col. 5, lines 55-58 where the IP datagrams constitute voice samples*)."

However, Sand lacks what Thornton discloses, "wherein the endpoint is a first endpoint, further comprising means for signaling...the second endpoint (*col. 42, lines 57-col. 43, lines 1-9 where the gateways communicate with each other through the*

*signalling network and communicate "registration, admissions, bandwidth usage, and status messages between" them).*"

It would have been obvious to one with ordinary skill in the art at the time of invention to include the signalling between endpoints for the purpose of communicating between the two of them. The motivation for having two endpoints communicate is so that when a call or setup is requested, the required bandwidth and other resources can be allocated based on the need of the call and thus the call can then be placed.

Regarding claims 9, 20, 31, and 45, Sand lacks what Thornton further discloses, "means for identifying the second endpoint at the first endpoint (*col. 42, lines 57-col. 43, lines 1-9, if one gateway can communicate with the other, both gateways must be known and identified to each other*)." It would have been obvious to one with ordinary skill in the art to identifying the second endpoint for the same reasons and motivation as in claims 8, 19, 30, and 44.

Regarding claims 10, 21, 32, and 46, Sand further discloses, "...log quality information (*col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6*))."

However, Sand lacks what Thornton further discloses, "means for opening a control channel to the second endpoint (*col. 42, lines 57-col. 43, lines 1-3 where the RAS channel is the control channel*); and means for signaling the second



Art Unit: 2661

endpoint...over the control channel (*col. 42, lines 57-col. 43, lines 1-9 where the RAS channel is the control channel and is used to transmit various control information between endpoints*).” It would have been obvious to one with ordinary skill in the art to open a control channel and signal the second endpoint for the same reasons and motivation as in claims 9, 20, 31, and 45.

Regarding claims 11, 22, 33, and 47, Thornton lacks what Sand further discloses, “the second endpoint comprises a gateway to a PSTN (*figure 2, elements 29 are PSTN's connected to the network via gateways*).” It would have been obvious to one with ordinary skill in the art to have the second endpoint comprise a gateway connected to a PSTN for the same reasons and motivation as in claims 10, 21, 32, and 46.

Regarding claim 35, Sand further discloses, “...log quality information (*col. 7, lines 31-34 where the calibration file is a sort of log file that contains information on acceptable voice quality; it should also be noted that steps 1-10 are from cols. 5 and 6*).”

However, Sand lacks what Thornton further discloses, “identifying the second endpoint at the first endpoint (*col. 42, lines 57-col. 43, lines 1-9, if one gateway can communicate with the other, both gateways must be known and identified to each other*); opening a control channel to the second endpoint (*col. 42, lines 57-col. 43, lines 1-3 where the RAS channel is the control channel*); and means for signaling the second endpoint...over the control channel (*col. 42, lines 57-col. 43, lines 1-9 where the RAS*

*channel is the control channel and is used to transmit various control information between endpoints).*"

It would have been obvious to one with ordinary skill in the art at the time of invention to include the signalling between endpoints for the purpose of communicating between the two of them. The motivation for having two endpoints communicate is so that when a call or setup is requested, the required bandwidth and other resources can be allocated based on the need of the call and thus the call can then be placed.

#### ***Response to Arguments***

4. Applicant's arguments, see REMARKS, page 9, *Claim Objections* section, filed 5 January 2005, with respect to the objections to the claims from the previous Office Action have been fully considered and are persuasive. The objections of the claims from the previous Office Action have been withdrawn.

5. Applicant's arguments filed 5 January 2005 have been fully considered but they are not persuasive.

Applicant asserts that, for all claims, neither Sand nor Thornton disclose, "receiving a signal from a user for logging quality information," and "collecting, in response to the signal, voice samples from the voice connection at the endpoint." Therefore, all claims are allowable over the prior art. The examiner respectfully disagrees.

Art Unit: 2661

As read in the rejection above, Sand fully discloses receiving a signal with voice samples in it for the purpose of determining quality information. The quality measuring system is further seen in figure 2 where the telephone 20 is used to send voice data across the network. This voice data is further sent across the network as voice samples, this is further supported in figure 7 of Sand where the datagrams from the speech signal are voice samples. Further, as in the rejection above, the voice samples are always collected in response to the signal because the voice samples are carried in the signal. Therefore, Sand fully reads on applicant's claimed invention, thus obviating Thornton from having to resolve the deficiencies.

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2661

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (571) 272-3070. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Joshua Kading  
Examiner  
Art Unit 2661

June 1, 2005

  
CHAU NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600